

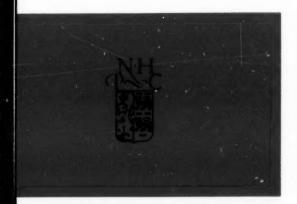
# CHEMICAL PHYSICS LETTERS

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(1990) 513. Erratum	167 (1990) 609
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Basu, S., D.N. Nath and M. Chowdhury, Time-resolved studies of the effect of a magnetic	
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Bates, D.R., Quenching of $O_2({}^5\Pi_g)$ by $N_2$ and termolecular association of O atoms	162 (1989) 313
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Beswick, J.A. and J. Jortner, Time scales for molecular photodissociation Bettinelli, M. and C.D. Flint, ${}^{7}F_{0} \rightarrow {}^{5}D_{0}$ excitation spectrum of Cs <sub>2</sub> NaEu0	168 (1990) 246
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	•
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ergy hypersurfaces and thermodynamics of formation, Chem. Phys. Letters 82 (1981)	
469. Erratum	167 (1990) 378
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Jameson, C.J., A. De Dios and A.K. Jameson, Absolute shielding scale for <sup>31</sup> P from gas-		
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Jensen, F., The [1,3]-hydrogen shift in cyclopropene. Does it exist?	169 (1990) 204 161 (1989) 368	
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Jensen, H.J.Aa., P. Jørgensen, T. Helgaker and J. Olsen, Accurate calculations of the dy-	109 (1990) 319	,
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	,	

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analogues at low temperatures  Krechl, J., see J. Andrés  Kress, J.D., R.T Pack and G.A. Parker, Accurate three-dimensional quantum scattering calculations for $F+H_2\rightarrow HF+H$ with total angular momentum $J=1$ Krisst, J.D., R.T Pack and D. Mathur, An experimental and theoretical study of the negatively charged helium dimmer, $H_{27}$ Kristensen, M., S.R. Keiding and W.J. van der Zande, Lifetime determination of the long-lived $B^{\dagger}\Pi_{g}$ state in $He_{2}^{*}$ by photofragment spectroscopy  Kristensen, M., S.R. Keiding and W.J. van der Zande, Lifetime determination of the long-lived $B^{\dagger}\Pi_{g}$ state in $He_{2}^{*}$ by photofragment spectroscopy  Kristensen, M., S.R. Keiding and W.J. van der Zande, Lifetime determination of the long-lived $B^{\dagger}\Pi_{g}$ state in $He_{2}^{*}$ by photofragment spectroscopy, Chem. Phys. Letters 164 (1989)  600. Erratum  Kroger, K.S., see E.R. Lovejoy  Kroon, J., see J.M. Lawson  Krogh-Jespersen, K., see J.T. Blair  Kroon, J., see J.M. Lawson  Kroon, R., R. Sprik and A. Lagendijk, Vibrational dephasing in highly compressed liquid nitrogen studied by time-resolved stimulated Raman gain spectroscopy  Krotscheck, E., see T. Pang  Krutchinsky, A.N., see V.A. Elokhin  Krotscheck, E., see T. Rang  Krutchinsky, A.N., see V.A. Elokhin  Kubach, C., A new method for the treatment of reactive collisions involving one light and two heavy nuclei  Kubodera, K., see R.J. Bartlett  Kubodera, K., see R.J. Bartlett  Kuchitsu, K., see S. Ohshima  Kudo, T., see S. Nagase  Kudo, T., and S. Nagase, The cyclotrisilane radical cation and its ring-opened isomers. A theoretical study of $S_{13}H_{0}^{*}$ Kuki, M., H. Hashimoto and Y. Koyama, The $2^{1}A_{0}^{*}$ state of a carotenoid bound to the chromatophore membrane of $Rhodobacter$ sphæroides 2.4.1 as revealed by transient resonance Raman spectroscopy  Kukolich, S.G., see D.J. Pauley  Kukolich, S.G., see D.J. Pauley  Kukolich, S.G., see D.J. Combariza  Kulkarin, S.K., Y. Lin and M.C. Heaven, Fluorescence decay and non-radiative relaxation  Kulkarin, S.	of the luminescence in the materials $[Ru(bpy)_x(bpy-d_8)_{3-x}]^{2+}$ , $x=0-3$ , in dilute system	ms 165 (1990) 401
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Kress, J.D., R.T Pack and G.A. Parker, Accurate three-dimensional quantum scattering calculations for $F+H_2-HF+H$ with total angular momentum $J=1$ Krishnamurthy, V. and D. Mathur, An experimental and theoretical study of the negatively charged helium dimmer, $He_2^-$ Kristensen, M., S.R. Keiding and W.J. van der Zande, Lifetime determination of the long-lived B $^{1}\Pi_{g}$ state in He $_{2}^{2}$ by photofragment spectroscopy  Kristensen, M., S.R. Keiding and W.J. van der Zande, Lifetime determination of the long-lived B $^{1}\Pi_{g}$ state in He $_{2}^{2}$ by photofragment spectroscopy, Chem. Phys. Letters 164 (1989) 600. Erratum  Kroeger, K.S., see E.R. Lovejoy  Kroeger, K.S., see E.R. Lovejoy  Kroogh-Jespersen, K., see J.T. Blair  Kroogn, J., see J.M. Lawson  Kroon, R., R. Sprik and A. Lagendijk, Vibrational dephasing in highly compressed liquid nitrogen studied by time-resolved stimulated Raman gain spectroscopy  Krotscheck, E., see T. Pang  Krotscheck, E., see T. Pang  Krutchinsky, A.N., see V.A. Elokhin  Kubach, C., A new method for the treatment of reactive collisions involving one light and two heavy nuclei  Kubodera, K., see R.J. Bartlett  Kucharski, S.A., see R.J. Bartlett  Kucharski, S.A., see R.J. Bartlett  Kucharski, S.A., see S. Nagase  Kudo, T., see S. Nagase  Kudo, T., and S. Nagase, The cyclotrisilane radical cation and its ring-opened isomers. A theoretical study of Si <sub>3</sub> H <sub>2</sub> -  Kühl, K., see B. Heumann  Kuipers, E.W., see M.G. Tenner  Kuki, M., H. Hashimoto and Y. Koyama, The $2^{1}A_{\overline{g}}$ state of a carotenoid bound to the chromatophore membrane of Rhodobacter sphaeroides 2.4.1 as revealed by transient resonance Raman spectroscopy  Kukolich, S.G., see J.C Shea  Kuleshov, N.V., see E.P. Dubrovina  Kulkarni, S.A., see S.R. Gadre  166 (1990) 443  Kulkarni, S.A., see S.R. Gadre  166 (1990) 447  Kulkarni, S.K., Y. Lin and M.C. Heaven, Fluorescence decay and non-radiative relaxation	analogues at low temperatures	165 (1990) 407
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Kristensen, M., S.R. Keiding and W.J. van der Zande, Lifetime determination of the long-lived B ${}^1\Pi_g$ state in He $_2$ by photofragment spectroscopy, Chem. Phys. Letters 164 (1989) 600. Erratum 168 (1990) 112 Kroeger, K.S., see E.R. Lovejoy 167 (1990) 183 Krogh-Jespersen, K., see J.T. Blair 166 (1990) 429 Kroon, J., see J.M. Lawson 164 (1989) 120 Kroon, R., R. Sprik and A. Lagendijk, Vibrational dephasing in highly compressed liquid nitrogen studied by time-resolved stimulated Raman gain spectroscopy 161 (1989) 137 Krotscheck, E., see T. Pang 163 (1989) 537 Krutchinsky, A.N., see V.A. Elokhin 170 (1990) 193 Kubach, C., A new method for the treatment of reactive collisions involving one light and two heavy nuclei 165 (1990) 513; 167 (1990) 609 Kuchitsu, K., see S. Ohshima 165 (1990) 513; 167 (1990) 609 Kuchitsu, K., see S. Nagase 163 (1989) 23 Kudo, T., see S. Nagase 163 (1989) 23 Kudo, T. and S. Nagase, The cyclotrisilane radical cation and its ring-opened isomers. A theoretical study of $Si_3H_6^+$ 164 (1989) 385 Kuipers, E.W., see M.G. Tenner 166 (1990) 385 Kuipers, E.W., see M.G. Tenner 166 (1990) 385 Kuipers, E.W., see D.J. Pauley 167 (1990) 57 Kukolich, S.G., see D.J. Pauley 167 (1990) 67 Kukolich, S.G., see D.J. Pauley 167 (1990) 67 Kukolich, S.G., see D.J. Dauley 168 (1990) 485 Kuleshov, N.V., see E.P. Dubrovina 166 (1990) 445; 170 (1990) 473 Kulkarni, S.A., see S.R. Gadre 166 (1990) 445; 170 (1990) 271 Kulkarni, S.A., see S.R. Gadre 166 (1990) 445; 170 (1990) 271 Kulkarni, S.K., Y. Lin and M.C. Heaven, Fluorescence decay and non-radiative relaxation		
lived B $^{1}\Pi_{a}$ state in He $^{a}$ by photofragment spectroscopy, Chem. Phys. Letters 164 (1989) 600. Erratum  Kroeger, K.S., see E.R. Lovejoy  Kroger, K.S., see E.R. Lovejoy  Kroon, J., see J.M. Lawson  Kroon, J., see J.M. Lawson  Kroon, R., R. Sprik and A. Lagendijk, Vibrational dephasing in highly compressed liquid nitrogen studied by time-resolved stimulated Raman gain spectroscopy  Krotscheck, E., see T. Pang  Krutchinsky, A.N., see V.A. Elokhin  Krutchinsky, A.N., see V.A. Elokhin  Kubach, C., A new method for the treatment of reactive collisions involving one light and two heavy nuclei  Kubodera, K., see T. Kurihara  Kucharski, S.A., see R.J. Bartlett  Kucharski, S.A., see R.J. Bartlett  165 (1990) 513; 167 (1990) 609  Kuchitsu, K., see S. Ohshima  169 (1990) 331  Kudo, T., see S. Nagase  Kudo, T. and S. Nagase, The cyclotrisilane radical cation and its ring-opened isomers. A theoretical study of Si <sub>3</sub> H <sub>6</sub> <sup>+</sup> Kihl, K., see B. Heumann  166 (1990) 385  Kuipers, E.W., see M.G. Tenner  Kuki, M., H. Hashimoto and Y. Koyama, The $2^{1}A_{6}^{-}$ state of a carotenoid bound to the chromatophore membrane of Rhodobacter sphaeroides 2.4.1 as revealed by transient resonance Raman spectroscopy  Kukolich, S.G., see D.J. Pauley  Kukolich, S.G., see D.J. Pauley  Kukolich, S.G., see D.J. Pauley  Kukolich, S.G., see D.J. Poubrovina  Kuklarni, S.A., see S.R. Gadre  166 (1990) 445; 170 (1990) 473  Kulkarni, S.A., see S.R. Gadre  166 (1990) 445; 170 (1990) 271  Kulkarni, S.K., Y. Lin and M.C. Heaven, Fluorescence decay and non-radiative relaxation		
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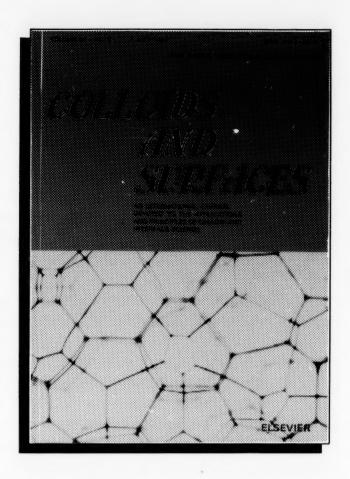
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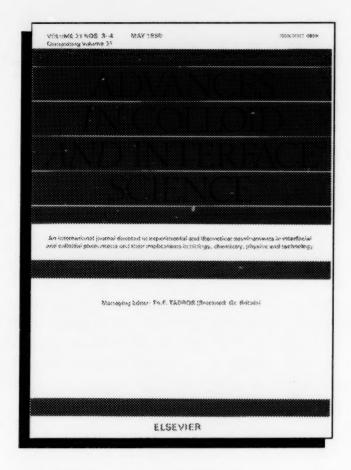
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